Musée Botanique de M. Benjamin Delessert. Par A. Lasègue: Paris, 1845. 8vo.

This highly interesting volume of nearly 600 pages is devoted to the description of the herbarium and botanical library of the justly celebrated Delessert, and the plan which has been adopted by its author is such as to make it a most valuable addition to the library of every botanist.

The herbarium and library of M. B. Delessert was commenced by his brother, and has been so much enlarged since his death, as to form one of the most extensive and valuable collections of specimens and botanical works in existence, the whole of which is opened to botanists with the greatest liberality.

In the earlier part of the volume will be found a very interesting chapter upon the statistics of vegetation. From this we learn that in 1546 Lonicer was acquainted with only 879 plants; in 1570 Lobel knew 2191; in 1587 Dalechamp recorded 2731. The interest of these numbers is however less than that of the table of increase of species since the reformation of botany by Linnæus. We copy this table.

Authors.	Years.	Number of species. Phanerog.	Cryptog.	Total.
Linnæus......	1753	5,323	615	5,938
Persoon	1807	19,949	6,000	25,949
Steudel	18-4	39,681	10,965	50,619
Steudel	1841	78,000	13,000	91,000
Steudel	1844	80,000	15,000	95,000

It is remarkable that the single order *Compositæ* is now known to contain more species (8523, DeCand. Prod.) than the whole number of plants known to Linnæus, and also that the relative proportion of that order to the whole vegetable kingdom has continued nearly unchanged to the present day, it being about one-tenth of the whole. Tables are then given of the increase of the number of recorded genera and of natural orders. Also a series of calculations of the probable number of species inhabiting the globe, which M. Lasègue is led to estimate at from 130,000 to 150,000.

An account is next given of the mode of preservation and arrangement adopted in M. Delessert's herbarium, which contains about 86,000 species and 250,000 specimens, besides a large collection of fruits. It is peculiarly rich in the authentic specimens of botanical authors.

By far the larger portion of the work is occupied by a very full account of the voyages and travels which have been undertaken with a view to the collection of specimens of plants. This we look upon as peculiarly valuable information, since much of it was formerly scattered through very numerous works, and was indeed unattainable without much labour and research.

A short account is given of the principal herbaria of Europe.

The account of M. Delessert's library is merely in general terms,

from which we learn that it contains 4350 botanical works. It is greatly to be hoped that an arranged and descriptive catalogue of this library will be prepared and given to the public. We know of few works which would be of greater service to botanists.

A copious index concludes the volume. The whole evinces in every part the hand of a master, and does its author the greatest credit. It only requires to be known to find its way into the hands of all botanists.

Classification der Säugethiere und Vögel. Von J. J. Kaup. Pp. 144. 8vo. Darmstadt, 1844.

In this work the author endeavours to arrange the Mammalia and Birds, and elaborates them into a quinary system, resembling in structure but differing in detail from the quinary systems which flourished for a time in this country. Like the British quinarians, Dr. Kaup insists on a uniformity and constancy in the analogies between corresponding groups, while he follows Oken in extending these analogies to the anatomical systems of organization which are more or less developed in each animal according as it represents one set of organs or another. Thus he makes his first subkingdom to consist of—1. Mollusca, or *generation-animals*; 2. Fish, or *muscle-animals*; 3. Amphibia, or *bone-animals*; 4. Birds, or *lung-animals*; 5. Mammalia, or *sense-animals*. He then proceeds to ring the changes on these anatomical structures, maintaining that the same set of analogies pervade all the minor groups: that the *Rasores* are *generation-birds*; the *Natatores*, *muscle-birds*; the *Grallatores*, *bone-birds*; the *Insessores*, *lung-birds*; the *Scansores*, *sense-birds*, and so on. It is needless to follow the author further in these far-fetched and visionary analogies, which are so much more congenial to the German than to the British mind, and which are still better adapted to the astrologers and alchymists of the middle ages, who compiled learned volumes on the mutual analogies and influences between the *seven* metals, the *seven* planets, the *seven* ages of man's life, &c. &c.

The appendix of Dr. Kaup's work is in our opinion the most valuable part of it. Laying aside his mysticism, he gives us some practical and useful remarks on several subjects connected with zoology. In one of these essays he criticises the *natural-history artists* of different countries, pointing out the defects and mannerisms so prominent in the French school, and the merits of Naumann among German, and of Landseer, Bewick and Gould among British artists. We do not however quite agree with Dr. Kaup in his preference of etching (*Radirung*) over lithography for zoological subjects.

Our author next gives directions for preparing plaster-casts of the heads of Mammalia, and especially of the *Quadrumana*. As these animals lose so much of their essential characters by the ordinary mode of preparation, a set of casts taken from them in a recent state would be a valuable addition to our museums. He also recommends naturalists when collecting in foreign countries to use various kinds of traps and nets, as being far more efficacious than the gun, for pro-